



(1) Publication number:

0 426 362 A3

(P)

EUROPEAN PATENT APPLICATION

(1) Application number: 90311638.2

(51) Int. Cl.5: G06K 11/08

2 Date of filing: 24.10.90

Priority: 03.11.89 FI 895242

43 Date of publication of application: 08.05.91 Bulletin 91/19

 Designated Contracting States: AT BE CH DE DK ES FR GB GR IT LI LU NL SE

Date of deferred publication of the search report: 09.10.91 Bulletin 91/41

7) Applicant: HEIKKI MARTTILA OY Vasarakatu 24

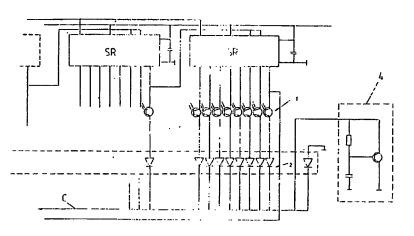
SF-40320 Jyväskylä(FI)

Inventor: Heikkinen, Kari Pukkimäenkatu 6 B 7 SF-44100 Äänekoski(FI) Inventor: Savolainen, Juha Sepänkatu 11 C 3 SF-41500 Hankasalmi(FI)

(4) Representative: Barlow, Roy James et al J.A. KEMP & CO. 14, South Square, Gray's Inn London WC1R 5LX(GB)

- 59 Switching circuit for a contact display panel.
- The invention relates to a contact display panel circuitry in which the phototransistors (1) are on two adjacent sides of the contact display panel and the diodes emitting infrared radiation to the phototransistors are on the opposite sides, and in which, under the control of transfer registers, each phototransistors (1) in turn is coupled to a common line (c), the logic circuit of the device being capable of computing the location of a possible contact point

on the basis of changes in the signal in the common line (c). According to the invention the use of controllable switches and numerous resistors and capacities is avoided by coupling in series with the phototransistor (1) a diode (2) in such a manner that the collector of the phototransistor is coupled to the transfer register and the emitter is coupled via the said diode (2) to the common line (c).





EUROPEAN SEARCH REPORT

EP 90 31 1638

		h indication, where appropriate,		elevant	CLASSIFICATION OF THE
egory	of rele	vant passages		claim	APPLICATION (Int. CI.5)
A	US-A-3 764 813 (F.J. CLE * Abstract; figures 2A-1 *	MENT et al.)	1,2	!	G 06 K 11/08
Α	US-A-4 703 316 (T.G. SHE * Abstract; column 3, lines 6 		1,2	!	
	·				TECHNICAL FIELDS SEARCHED (Int. Cl.5)
					G 06 K
	The present search report has t	een drawn up for all claims			
	Place of search	Date of completion of	search	 ;	Examiner
	The Hague				BRAVO P.
The Hague 11 July 9 CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure			E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons 8: member of the same patent family, corresponding		